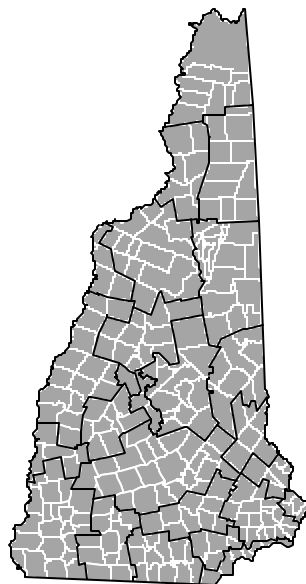




New Hampshire Regional Health Profiles

Preface and Introduction



July, 2001

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The New Hampshire Health Care Plan

In 1995, the Legislature directed the Department of Health and Human Services (DHHS) to prepare “a comprehensive and coordinated system of health and human services as needed to promote and protect the health, safety and well-being of the citizens of New Hampshire” (RSA 126A). The DHHS Office of Planning and Research responded by creating a statewide Health Care Planning Process that involved more than 1000 New Hampshire residents in 7 community councils, 22 focus groups, 18 town meetings, and 4 symposia.

This planning effort culminated in the issuance of the October 1998 report, *The New Hampshire Health Care System: Guidelines for Change*. The report set forth 27 recommendations designed to improve the State’s ability to: monitor and manage the rapidly evolving health care system; increase communities involvement in and direction of the health care system; enhance the ability of the market to perform effectively; and assure that New Hampshire citizens have access to needed health care. *Guidelines for Change* established the direction and goals of the State Health Care Plan. *The Health of New Hampshire’s Community Hospital System: A Financial and Economic Analysis* is another in the series of reports that constitute the New Hampshire Health Plan (see the following page for a complete listing of the reports issued to date and how to obtain copies).

Beginning in the fall of 1998, the Department of Health and Human Services began taking steps to implement the recommendations contained in the *Guidelines for Change*. One of the first action steps completed was the statewide Household Insurance Coverage and Access Survey (recommendation 2) that established a baseline estimate of New Hampshire’s uninsured (see *Health Insurance Coverage in New Hampshire*).

Another major step in the implementation of the *Guidelines for Change* - the analysis of New Hampshire’s health care market - began in the spring of 1999. The DHHS, Office of Planning and Research, partnered with the Department of Insurance and the Attorney General’s Office to begin the joint monitoring of the health care market (Recommendation 1) and to develop a data system that provided information on the performance of the market (Recommendation 15). During this same time, the DHHS and the Attorney General’s Office conducted a series of workshops on the new community benefits legislation (Recommendation 27).

The Health of New Hampshire’s Community Hospital System: A Financial and Economic Analysis and *Strengthening the Safety Net: A Financial Analysis of New Hampshire’s Community Health Centers* are reports developed from the health care market monitoring activities

The *New Hampshire Regional Health Profiles* is a pilot project and was developed jointly by the Dartmouth Hitchcock Alliance and the Department in response to the legislative mandate (RSA 126A as amended by Senate Bill 183, 1999) that the health status of the State’s residents be assessed on a continual basis and that the results be made public. This legislative mandate is consistent with Recommendation 15 of the *Guidelines for Change*: “Develop the capacity to provide data that allows citizens to review the health status of communities and the statewide population; to understand the performance of the State and market functions; and to understand the status of community concerns.” As a pilot project, the Regional Health Profiles is intended to serve as a foundation for an improved data and information flow to communities.

New Hampshire Health Care Plan Reports

The Elements of an Ideal Health Care Delivery System

An Inventory of Health Status Indicators

New Hampshire's Health Status Goals

Health Planning, Values and Preferences

The State, Communities, and Individuals: Roles and Responsibilities in New Hampshire's Health Care System

The New Hampshire Network Survey Report

Creating a Healthier New Hampshire: A Consumer Report on Proposed Changes to New Hampshire's Health Care System

The New Hampshire Health Care System: Guidelines for Change

Health Insurance Coverage in New Hampshire

Strengthening the Safety Net: A Financial Analysis of New Hampshire's Community Health Centers

The Health of New Hampshire's Community Hospital System: A Financial and Economic Analysis

Community Grant Program Five – Year Report, 1996 - 2000

Regional Health Profiles

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Preface

The New Hampshire Regional Health Profiles were developed by the Department in partnership with The Dartmouth Hitchcock Alliance. Eugenia Hamilton, BSN, MHSA, Senior Vice President for Strategic Planning, and Charles Townsend, MA, Information Analyst for Strategic Planning, from the Dartmouth Hitchcock Alliance volunteered their time and expertise to develop the conceptual design and data for the Regional Health Profiles.

John Bonds, Administrator for Planning Coordination, Office of Planning and Research (OPR), had day-to-day responsibility for project management and implementation. He also web enabled the Regional Health Profiles for public use.

Jim Zibailo, Research Assistant, OPR, developed the maps and, with Charles Townsend, assured that the tables and figures were accurate and understandable.

Steve Norton, Director, Knowledge Management and Decision Support for the Department, while Senior Health Policy Analyst in OPR and since taking his new position, worked with Eugenia Hamilton and Charles Townsend in moving the Regional Health Profiles from concept to reality, especially in bringing important findings from the 1999 NH Health Insurance Coverage and Access Survey to the project.

Dorothy Bazos while studying under Elliott Fisher, MD, MPH, as a PhD candidate at the Center for Evaluative Clinical Studies at Dartmouth, worked as a consultant to Eugenia Hamilton and Charles Townsend to develop the theoretical concepts of this project. Since joining OPR as Senior Health Policy Analyst, Dorothy has lent her expertise in community health research to the completion of the Regional Health Profiles.

The Regional Profiles could not have been completed without the technical review and assistance of a group of experts who know the importance of data to community assessment and planning. The Alliance and the Department wish to thank:

Kathy Bizarro, NH Hospital Association
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Deborah White, Helms and Company

The Alliance and the Department wish to thank the New Hampshire Hospital Association and its members for their input to the initial drafts of the Regional Health Profiles.

Lori Real, Director of the Office of Planning and Research, DHHS, provided overall direction for the Regional Health Profiles project and worked to assure that its development was coordinated with other State agencies and key organizations and associations.

Special recognition and thanks are extended to Kelly Kimball, OPR, and Ronald Provencher, Office of Information Systems, for their contributions and hard work that made the Regional Profiles possible.

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Regional Health Profiles

Purpose

The purpose of the Regional Health Profiles is to provide organizations and communities with information to support local efforts to assess the health and well-being the State's population. The *Regional Profiles* provide health and human service providers, policy makers, and consumers with an overview of selected indicators on the demographics, health status, health behaviors and health system utilization of New Hampshire residents. These indicators are presented in narratives for each of New Hampshire's 24 healthcare service areas (HSA). They are also presented in tables and maps, which allow for comparison to the state rates and other HSA rates.

These profiles were developed in response to Senate Bill 183. SB183, passed by the Legislature in 1999, amended RSA 126A includes a requirement for the Department of Health and Human Services to (a) assess the health status of the State's residents on a continual basis and (b) summarize and make public the results from these health assessments every two years. These Profiles were also developed in support of State and local implementation of *Healthy New Hampshire 2010* and the Community Benefits legislation (Senate Bill 69, 1999).

The New Hampshire Health Care System: Guidelines for Change

The genesis for Senate Bill 183 was the statewide Health Care Planning Process that involved more than 1,000 New Hampshire residents in seven communities, 22 focus groups, 18 town meetings and 4 Symposia. The planning work resulted in the issuance of the October 1998 report, *The NH Health Care System: Guidelines for Change*. The following Values (Figure 1), Health Status Goals (Figure 2) and Recommendation (Figure 3) in the Guidelines for Change resulted in SB 183 and thus the Regional Health Profiles.

Figure 1

<p>New Hampshire Health System Values The NH Health Care System: Guidelines for Change</p> <ol style="list-style-type: none">1. Every New Hampshire resident will have access to necessary health care services regardless of individual circumstances.2. The health care system will be based on desired health outcomes as determined by well-defined indicators for measuring health.3. The health care system will emphasize quality of care and focus on managing costs.4. Health care consumers will be empowered and assume primary responsibility for their health and for the care they receive.5. Communities will play a role in the organization and integration of health systems and in the delivery of health care services.
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Figure 2

<p style="text-align: center;">Health Status Goals The NH Health Care System: Guidelines for Change</p> <ol style="list-style-type: none">1. New Hampshire residents will live with independence and satisfaction as contributing members of their communities.2. New Hampshire residents will live with a minimum of disease and disability.3. New Hampshire residents will live in safe and supportive homes and communities.4. New Hampshire residents will live free of environmental hazards.5. New Hampshire residents will have the educational and economic opportunities they need to realize their full potential.6. New Hampshire residents will choose behaviors which contribute to health and well-being.
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Figure 3

<p style="text-align: center;">Recommendation 15 The NH Health Care System: Guidelines for Change</p> <p>Develop the capacity to provide data that allows citizens to review the health status of communities and the statewide population; to understand the performance of State and market functions; and to understand the status of community concerns.</p>
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Healthy New Hampshire 2010

Healthy New Hampshire 2010 is New Hampshire's health promotion and disease prevention agenda for the first decade of the 21st century. The Regional Health Profiles offer communities regional information for 14 of the Healthy New Hampshire 2010 objectives. This information can be used by communities to establish regional baseline measures, regional *Healthy New Hampshire 2010* targets, and to help in prioritizing where to start first with regional health improvement projects.

Community Benefits

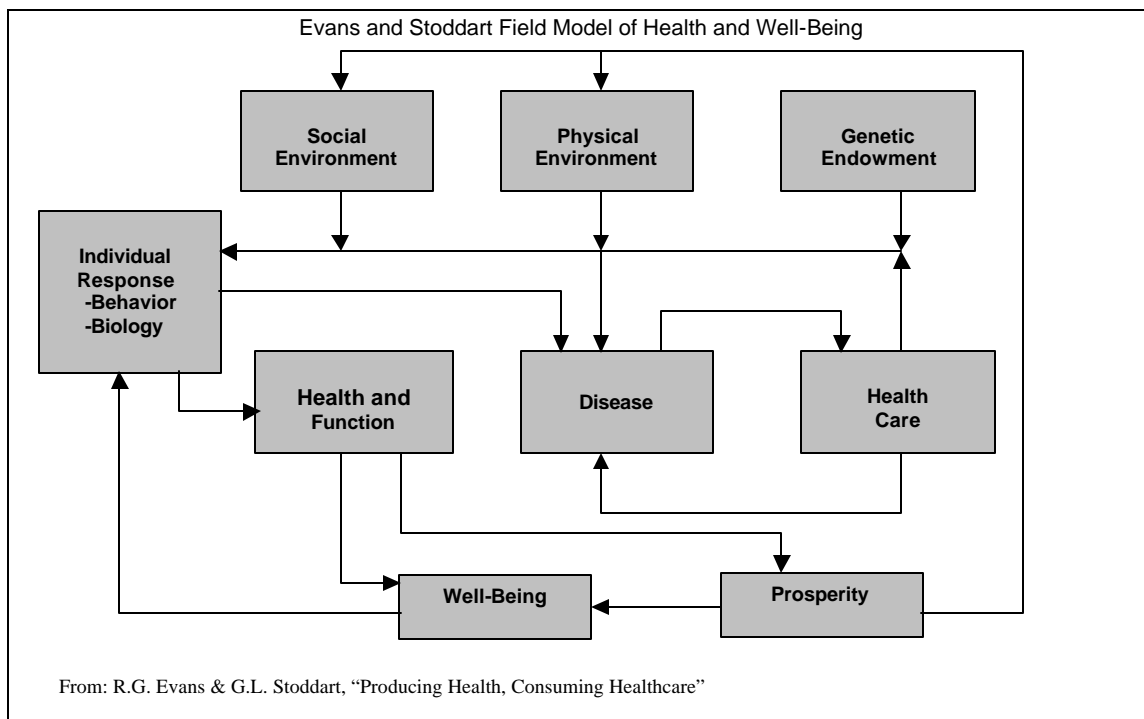
The community benefits legislation, Senate Bill 69, was passed by the Legislature in 1999. This legislation requires that health care charitable trusts having at least \$100,000 in assets develop a "community benefits" plan and local needs assessment every three years. The Regional Health Profiles are one set of tools that health care charitable trusts can use to conduct their needs assessment.

The Field Model of Health and Well Being

The *Regional Health Profiles* were developed based on the broad definition of health proposed initially by the World Health Organization and supported by the District Health Councils in the Guidelines for Change: “A state of complete well-being: physical, social and mental, and not merely the absence of disease or infirmity.”

The *Regional Profiles* supported this definition by adopting a broad and dynamic view of the determinants of health as the framework of this measurement effort. This conceptual framework is based on the Evans and Stoddart¹ Field Model of Health and Well-Being (Field Model; see Figure 4). The Field Model depicts nine broad domains of health important to the production of health at the individual or community level: social environment, physical environment, genetic endowment, individual behavioral response, health and function, disease, health care, prosperity and well-being. While the Field Model recognizes the important role of medical intervention in the production of health (i.e., it includes the domain of health care), it also highlights the importance of non-medical factors (e.g., prosperity, education, and income).

Figure 4



¹ Evans, R. G., and Stoddart, G. L., 1994. "Producing Health, Consuming Health Care." In Why Are Some People Healthy and Others Not? The Determinants of Health of Populations. R. G. Evans, M. L. Barer, and T. R. Marmor, eds. New York: Aldine De Gruyter.

Selection of Health Indicators

The Evans and Stoddart Field Model of Health and Well-Being include nine major domains that influence, either directly or indirectly, the health of community populations. Based on literature reviews and in consultation with community groups and experts, a wide array of indicators from available secondary data sources were identified to characterize each of these domains. Indicators were selected based upon the availability of:

- comparable national or local benchmarks;
- uniform data for most of the HSAs;
- ensuring patient confidentiality; and
- indicators recommended by the Center of Disease Control and the Institute of Medicine.

The specific indicators selected for inclusion in the *Regional Profiles* are listed below. The indicators were developed using published information from the 1993-1997 Primary Care Access Data publication (PCAD), 1997 and 1998 uniform hospital discharge data (UHDDS), 1990 Census and updates of that data, and data from the 1999 New Hampshire Health Insurance Coverage and Access Survey.²

Indicators selected for inclusion in the *Regional Profiles* have been recommended for use by the Centers for Disease Control (CDC) and the Institute of Medicine (IOM). In 1992, the Centers for Disease Control convened a panel of public health experts who developed a consensus set of 18 health status indicators “to assist communities in assessing their general health status and in focusing local, state, and national efforts in tracing” objectives relative to health.³ These indicators included, among others: infant mortality rates, death rates (related to motor vehicles, work related deaths, suicides, homicides, lung cancer, breast cancer, cardiovascular disease), percent of low birth weight infants, and percent of mothers receiving prenatal care in the first trimester. In addition, the Institute of Medicine⁴ proposed 25 indicators for the development of a community health profile. These indicators included such information as the distribution of the population by age, the number of linguistically isolated individuals, median income, unemployment, functional status, and quality of the health care system. The complete list of indicators from each of these sources is listed in the Technical Notes section.

² The PCAD is available from the Department of Health and Human Services, Office of Community and Public Health and a public use UHDDS is available from the same source. Researchers may also request more detailed data from that Office. The Department’s Office of Planning and Research conducted the Health Care Access and Insurance Survey and the report is available from that Office.

³ MMWR, 40, 27:449

⁴ Durch, J. S., Bailey, L. A., and Stoto, M. A., eds, 1997. Improving Health in the Community: A Role for Performance Monitoring. Institute of Medicine. Washington, D.C.: National Academy Press; pg 156.

The Indicators

The profiles categorize the indicators into three sections:

- Current Health
- Current Use and Access to Health Care Services
- Risks to Future Health

This format for summarizing and presenting community data was developed to facilitate discussion on community health needs and development of health improvement strategies at the community level. The following paragraphs describe each section:

Current Health. This category included measures of self-reported health status, chronic conditions, and prevalence of disability as well as measures of morbidity and mortality.

Current Use and Access to Health Care Services. The indicators included in this category provide important insights into how local health care systems are being used. Identification of barriers to health care access, particularly for vulnerable populations can provide communities with greater insights on how best to improve local health care systems so that they are more effective and efficient. For example, the rate at which people are admitted to the hospital for conditions that are generally responsive to early treatment in an outpatient setting (“ambulatory care sensitive conditions”) may result from unchecked acute (rapid onset) conditions, or from ongoing (chronic) conditions that have remained untreated. Being able to differentiate admissions in this way can be helpful for developing appropriate primary care strategies.

Risks to Future Health. It is vital to the economic well being of individuals, families and communities that avoidable diseases, injuries and other threats to well being be prevented. For the past five decades public health advocates and researchers have argued for an approach to population-based health improvement that takes into account the multiple factors that influence the production of health of populations. Those invested in population health improvement efforts must work not only to better understand the complex and dynamic relationships among health determinants, but also to develop local health improvement processes that include the development and implementation of proactive strategies aimed at addressing these underlying factors that influence the production of health. It is critical that local leaders understand that in most geographic areas of the US increasing the local capacity of the health care system will not improve the health status of local populations.⁵

This category includes measures on the multiple determinants of health that might affect the long-term health of community population. Indicators of unemployment, poverty and income levels, high school completion, smoking rates, and access to adequate health and dental care are included.

⁵ Evans, R.G., M.L. Barer, and T.R. Marmor, *Why are Some People Healthy and Others Not?* 1994, New York: Aldine De Gruyter. See also:

Wennberg, J.E., *The Quality of Medical Care in the United States: A Report on the Medicare Program. The Dartmouth Atlas of Health Care in the United States*, ed. J.E. Wennberg. 1999, Chicago: AHA Press.

Unit of Analysis

Figure 5 provides a map of the State's 24 Healthcare Service Areas (HSA). An HSA, also known as Hospital Service Area, is a regional geographic grouping of cities and towns that have been used by the Department as a means of breaking the State into units of analysis that are more meaningful than the State's large counties.

The HSAs were selected as the unit of analysis to:

- permit statistically meaningful comparisons between an HSA and the State, and between HSAs to each other;
- encourage agencies, organizations and providers from an area to work together on common problems which impact the resources of more than one community; and
- assist community health and social service agencies, hospitals, providers and residents in the development of their community needs assessment.

In developing the HSAs, five years of data from the State's 26 community hospitals were used. Communities were assigned to an HSA based on the hospital where the majority of each community's residents received their inpatient care. Twenty-four HSAs were identified using this method. Twenty of the HSAs have only one hospital while the Manchester, Nashua and Lebanon HSAs have two hospitals each. The final HSA has no hospital and is comprised of communities on the southeastern Massachusetts/New Hampshire border whose residents predominantly use Massachusetts' hospitals. Except for the Massachusetts Border Towns HSA, each HSA was named after the principal community in the area.

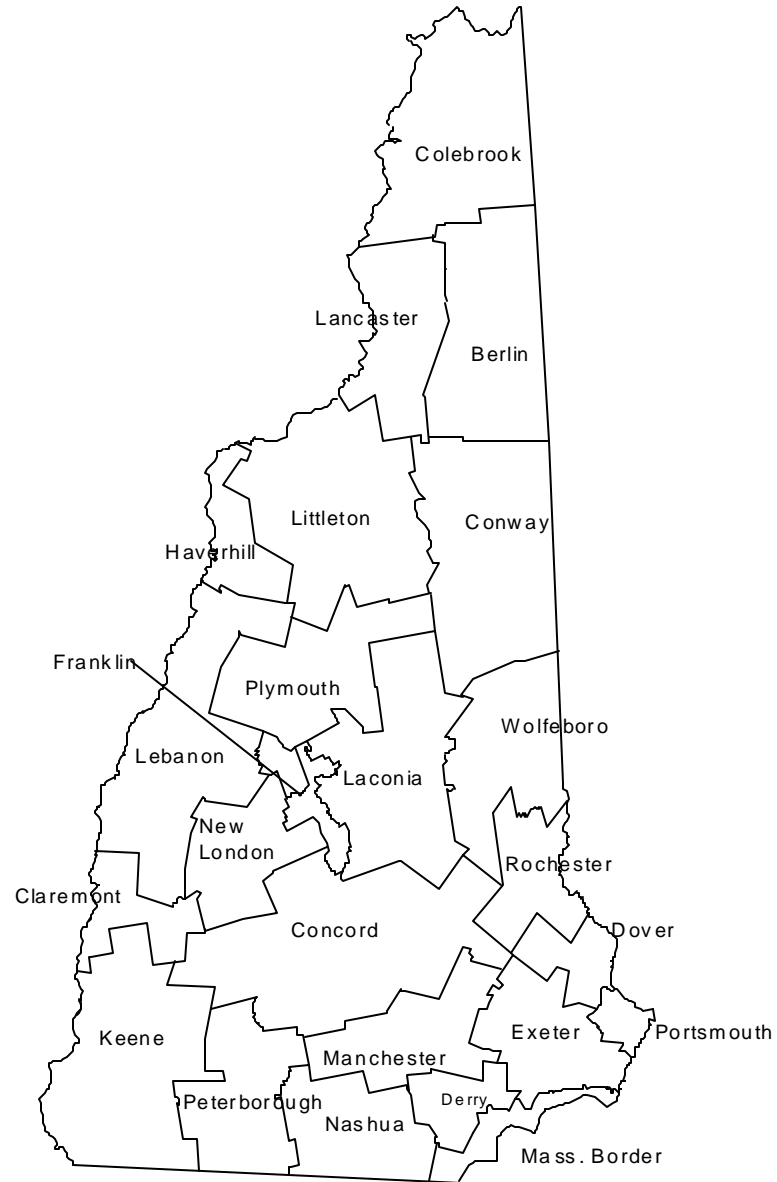
Using the HSA as the unit of analysis also allows communities to assess the health and well-being of the population within the context of knowledge of the capacity of medical resources, (i.e., the number of hospital beds, physicians, medical personnel, etc.) and knowledge in regard to utilization of these resources (i.e., utilization of hospitals for medical and surgical conditions). HSA data on the capacity and utilization of local medical resources have been developed and are accessible in *The Dartmouth Atlas of Health Care: The New England States*.⁶

Profiles are also included in the report for two of New Hampshire's largest cities – Nashua and Manchester. The first profile summarizes data of the city. The second profile summarizes data for the remainder of that hospital service area. Tables and graphs, however, permit the Manchester and Nashua HSAs to be compared with the other HSAs in the State.

⁶ Developed at Dartmouth Medical School, Center for Evaluative Clinical Studies; 1996. Published in cooperation with The Center for Health Care Leadership of the American Hospital Association.

Figure 5

Healthcare Service Areas



Health Profile Limitations

This section addresses four specific limitations of the health profiles: 1) Some data sets include too few data elements to be used as a basis for broad indicators of health. In addition, data for some indicators may be inadequate in that the numbers are too small or the indicator is too narrowly defined. 2) Data from the 1990 US Census is dated and data from the 2000 Census was not yet fully available. 3) Some important information is not available at the State or regional level, and 4) Aggregation of communities to the HSA level may not meet the needs of all potential users.

Small data sets. The profiles present data that spans the past decade. While more recent data may be available for some indicators (such as annual data from the State's vital records system), the numbers were too small to be used for many morbidity and mortality indicators. For this reason, multiyear public domain data sets, such as the Primary Care Data Set and the Uniform Hospital Discharge Data System were used.

US Census data is dated. Data drawn from the 1990 US Census is not available for non-census years. For that reason, when US Census indicators were seen as important, such as those in the "Additional Observations" section of each profile, the 1990 data are used to identify areas where new data from the 2000 US Census can be incorporated. As the US Census data is released in 2001-2002 the profiles will be updated with this information.

Data is not available at the state or regional level. Additional data could enrich the profiles. For example:

Current Health: Information on mental health status, number of work-related injuries, rates of late stage cancers of the breast, cervix and colon, information on rates of communicable diseases, obesity and diabetes rates.

Use of Health Care Services: Information on variable rates of both in- and out-patient surgical procedures, the use of emergency departments, the percentage of elderly residing in long-term care facilities, and the cost of health care and lost work related to use of alcohol and tobacco.

Risks to Future Health:

Individual behavior: Adult and teen use of tobacco, alcohol, illicit drugs, seat belts, bicycle and motorcycle helmets, rates of driving while intoxicated, domestic violence, juvenile offenses, childhood and adult immunization rates.

Social environment: Scholastic completion and achievement, available child care slots, marriage and divorce rates, illiteracy rate, percent of minors removed from parental custody, availability and use of public transportation.

Prosperity: Relationship between median incomes and livable wages, rental costs and vacancy rates, use of homeless shelters and other measures of homelessness, the gap between upper and lower quartiles in median income.

The Unit of Analysis. The aggregation of community data into HSAs may not meet the needs of everyone. There is no single aggregation of communities that will meet the needs of all people and organizations. Thus, the only grouping of communities that would make sense to the majority of community health planners would be a grouping that they could create by aggregating data to meet their individual needs. Special data requests can be made to New Hampshire Department of Health and Human Services, Office of Community and Public Health, Epidemiology and Vital Statistics

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Email: healthstats@dhhs.state.nh.us. Or visit their website: www.dhhs.state.nh.us/healthstats

An Outline of the Regional Health Profiles

The Regional Profiles are divided into the following three major sections.

I. A Regional Health Profile for each of New Hampshire's 24 healthcare service areas. This section includes five components:

1. A Standard Introduction and Map
2. An overview of the region's towns, population, median family income, percentage of inpatient hospital health care charges that are 'self-pay' (not covered by insurance or from some other source, such as Medicaid) population density of each town and the distance from each town to the nearest hospital as an indication of the extent geographic barriers to care faced by communities.
3. Demographic Profile of the region's population to the State's population for specific age groups.
4. Health Profile indicators for Current Health, Health Care Utilization, Risks to Future Health.
5. Data Notes and Sources

II. Tables, Figures and Maps

1. Tables: Summary Data Tables for all indicators for all HSAs and State benchmarks.
2. Figures: Figures that summarize all indicators for all HSAs and State benchmarks. It is important to note that the Tables and Figures provide a summary of the same data. Both tables and graphs were used to present a summary of the data in order to accommodate community preferences for data display.
3. Maps: Maps for selected indicators, which visually display differences between HSA's, which were significant.

III. Technical Notes with definitions, data sources, and methods used for summarizing the data and for determining significance.

Your Comments

Please contact us with your comments or suggestions on the Health Profile s:

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